

**BAREC Site Redevelopment Due Diligence
Boundary Survey and Utility Capacity**

October 2002 (Revised November 2002)

**CSW
[St]²**

Summary

Based on boundary survey work and coordination with utilities, we did not identify any development concerns that would preclude site redevelopment. The site, which has an approximate area of 17.16 acres, has two small encroachments that should not impact development. Through communications with utility representatives, neither utility capacity nor the cost of utility extension will be project impediments.

Boundary Survey

The data research, field surveys, and analysis have been completed. Based on that work, a preliminary map of the site has been prepared and has been provided to the project team. A final boundary map is being prepared. The final map will only differ from the preliminary in small details, none of which should be pertinent to the possible redevelopment.

Based on the site boundary work, two apparent encroachments were noted. First, the driveway along the north side of the State of California Veterans' Affairs office at the southeast corner of the site is an apparent encroachment. The Santa Clara County Assessor shows the driveway as a separate parcel. However, the Regents of the University of California own the parcel, therefore we have considered it to be a part of the BAREC site. Despite the ownership by the Regents, the driveway is fenced to provide access only to the Veterans' Affairs office and, according to the BAREC superintendent, is maintained by the State of California, not the BAREC staff. The title report provided to us did not indicate an easement for the driveway. Therefore, we have tentatively identified it as an encroachment. The approximate area of the apparent encroachment is 5,500 square feet, or 0.13 acres.

Second, a segment of Forest Street crosses the northwest corner of the site. A fence has been installed between the street improvements and the BAREC site. The triangle of land that is apparently within the BAREC site but outside of the fence has an approximate area of 1,450 square feet, or 0.03 acres. The Forest Street right-of-way was established by a final map recorded in March 1953. The street centerline is aligned such that an encroachment on the BAREC site was required for road construction. This would imply that that the road alignment was coordinated with the University and that an easement or lot line adjustment agreement was reached. However, the title report provided to us did not indicate either.

Both encroachments are relatively minor, and reflect long-standing land-use patterns. Therefore, neither encroachment should be considered an impediment to development. However, both should be resolved prior to a land sale. In particular, the Forest Street road encroachment is not significant because it will likely become a point of access for a new land use.

Utility Capacity

Preliminary contact was made with the utilities most likely to serve the redevelopment. The utilities were asked about existing facilities, adequacy of existing systems to support additional development, standards for utility extensions, construction obligations, and fees. If a

redevelopment configuration was requested upon which to base a response, we suggested a configuration that was similar to the lowest density alternative subsequently proposed by the project team. We indicated that the configuration was preliminary and subject to extensive adjustment as the project continued.

We are aware that subsequent project planning identified alternatives with up to 370 units. As described below, utility capacity was also assessed for these more dense development alternatives.

We also interviewed the BAREC superintendent about current site utilities.

Water

The current site use is served by the City of Santa Clara water system. However, the BAREC superintendent did not have available information on the current water usage. Furthermore, the superintendent indicated that that municipal water system was used only for domestic uses and that all irrigation was supplied by wells. Therefore, the current use of City water would be minimal relative to the eventual use after redevelopment.

A request has been made to Joe Fitch of the City of Santa Clara Municipal Utilities Department for the information on water service to the site. A similar request was made to Ramon Santos in the City of Santa Clara Land Development Department. Both Fitch and Gus Gomez of the Engineering Department provided responses.

According to Fitch, the City has a 12-inch water main in Winchester Boulevard along the front of the site and an 8-inch main in Henry along the back. He stated that the 12-inch main in Winchester Boulevard appears to have sufficient capacity to provide domestic water and fire protection to the lower-density proposed development. He also noted that the northern site boundary is the City Limit and that no City services may be expected to serve from that direction.

Based on the waterline sizes, the development of 370 units could apparently also be accommodated by the existing improvements.

Fitch stated that all new water main extensions or services would be reviewed by the Water Department for acceptability, with fees determined at the time the number and sizes of the services are finalized. He also noted that any construction beyond the metered service would be under the jurisdiction of the Building Dept. These policies and procedures are consistent with most municipalities and should not be considered project impediments.

Finally, Fitch noted that the City intends to increase the use of recycled water. He reported that there are no current plans to extend the recycled water system to the project site. However, depending upon the final extent and use of the site, the City would reserve the right to reevaluate for the possible use of recycled water.

Sewer

The superintendent for the current site use indicated that the site is now served by the City of Santa Clara sewer system. However, the sewage from the site is sufficiently small that it is not pertinent to the redevelopment.

A request has been made to Joe Fitch of the City of Santa Clara Municipal Utilities Department for the information on sewer service from the site. A similar request was made to Ramon Santos in the City of Santa Clara Land Development Department. In an initial response, Santos indicated that an eight-inch main was available to serve the site. He asked for additional information on the likely site use, and was provided the preliminary configuration described above. In a subsequent response, Fitch responded that the City has an 8-inch sanitary sewer in Winchester Boulevard and a 6-inch sanitary sewer in Henry. He also again noted that the northern site boundary of the site is the City Limit and that no services may be expected toward that direction.

For other jurisdictions, an eight-inch main can service approximately 550 single-family homes. Therefore, it is likely that the existing main will be appropriate for the site redevelopment up to 370 units. In a supplemental response, Gomez indicated that a final determination on sanitary sewer capacity would be based on an estimated peak sanitary sewer flow provided by the developer and the results of a weeklong monitoring of the existing system. For the more dense alternatives, this capacity analysis will be particularly important.

Gomez stated that the minimum sanitary sewer main size is 8 inches, with an acceptable material type of vitrified clay pipe. The minimum velocity in the sewer must be 2 feet per second flowing full or half-full. Although vitrified clay pipe is less frequently used than in the past, none of these standards are unusual nor would present particular development burdens.

Finally, Fitch cautioned that the limitation on sanitary sewer use might be regional. He reported that the San Jose/Santa Clara Water Pollution Control Plant has mandated a maximum discharge limit of 120 million gallons per day into South San Francisco Bay. Issuance of land use approvals or building permits for all projects may be delayed if the City has reached its remaining allocated discharge capacity prior to permit issuance. However, the City anticipates that the current allocation to the City is adequate for at least five more years.

Storm Drainage

A request has been made to Ramon Santos of the City of Santa Clara Land Development Department for the information on storm drainage from the site. On September 3, Santos indicated that a 27-inch storm drain was available to serve the site. He asked for additional information on the likely site use, and was provided the preliminary configuration described above. He indicated that the City design staff would be reviewing the site further, and that additional information would be provided as soon as possible. He noted that there was a section

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of 18-inch storm drain, approximately 200 feet in length, downstream of the site. He suggested that replacement of that section of storm drain might be a development requirement. We will include an estimated cost of this replacement in the cost estimate.

Santos also suggested communication with Benison Tran of the Santa Clara Engineering Department on storm drainage capacity. Tran reported that the City also had a 33-inch storm drain along Dorcich Street and Henry Avenue. However, although the Winchester Boulevard storm drain may be easily accessed, the Dorcich/Henry storm drain may only be accessed if a private easement can be secured from the property owners along the two streets.

As much of the site will have little or no permeability for any of the alternatives, this preliminary assessment would not be significantly impacted by the different development alternatives.

Tran also summarized the City Street Opening Permit (SOP) fees as follows:

- \$28.40 for processing fee
- 5.45% of construction cost for Review and Inspection Fee, with a minimum cost of \$51.40
- \$24.40 for first 50 feet of excavation plus \$0.20 per additional lineal foot for Storm Drain Field Marking Fee
- \$24.40 for first 50 feet of excavation plus \$0.20 per additional lineal foot for Sanitary Sewer Field Marking Fee

These fees are applicable for the current fiscal year and are subject to change each fiscal year.

In addition to SOP fees, there are development fees for new water, sewer, and storm hookup to municipal system.

These fees will also be included in our estimated cost.

Finally, Gomez stated that the City would perform a final assessment of storm drain capacity after a developer provides storm drain calculations for 10-year and 100-year event.

Electrical

A request has been made to Rita Alberts of the Silicon Valley Power (formerly City of Santa Clara Electric Department) for the information on electrical service to the site. On August 23, Clint Laird responded on behalf of Alberts. His responses were as follows:

- Although Pacific Gas and Electric currently serves the site, wheeling power from a bulk provider under the blanket University of California contract, Silicon Valley Power (SVP) will assume the electrical service after redevelopment. SVP has the capacity to serve a redevelopment.

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- There are existing SVP 12 kilovolt overhead lines along Winchester Boulevard and along Forest Avenue. SVP generally tries to loop their distribution system. For this site, it is probable that the electrical system would be extended from both Winchester and Forest.
- A developer will be required to install substructure (conduits, splice boxes, transformer pad, etc.) at his expense.
- All new facilities (substructure) will be underground. No subsurface transformers or vacuum switches will be allowed
- For single-family residential development the underground electric fee is \$1,020.75 per lot. For multiple-family, condominiums, and planned unit development, the fee is \$910.63 per living unit. There is also an Underground Street Lighting fee of \$1,609.21 per net acre for sites of over ten net acres that are developed for residential use.

The availability of electricity to serve the site would not be impacted by the different development alternatives.

Natural Gas

A request has been made to Patrick Pope of Pacific Gas and Electric for information on natural gas service to the site. As of the date of this report, no response has been received. However, natural gas availability within an existing neighborhood is not expected to be a constraint for any of the development alternatives.

Telephone

On September 3, I spoke with Frank Belasario of SBC Pacific Bell. He did not anticipate any specific site development concerns. At his request, a map of the site and a written description of the preliminary configuration were mailed to him, along with a request for his additional review and for his comments on costs. As of the date of this report, no response has been received. However, telephone availability within an existing neighborhood is not expected to be a constraint for any of the development alternatives.

Cable

On September 5, a letter was written to AT&T Broadband regarding specific site development concerns. A map of the site and a written description of the preliminary configuration were included, along with a request for his additional review and for his comments on costs. As of the date of this report, no response has been received. However, cable availability within an existing neighborhood is not expected to be a constraint for any of the development alternatives.

Geotechnical Review

The geotechnical characteristics of the site will be assessed after the environmental consultant and we have determined the extent of regrading to be performed for environment mitigation.

Preliminary Design

Preliminary design alternatives will be developed as land-use alternatives are identified. It is likely that the site will have dual access, from Winchester Boulevard and from Forest Avenue. The point of access from Winchester to coordinate with the existing signals at Forest and at Dorcich Street will be coordinated with the City of Santa Clara.

Construction Issues

As the preliminary design alternatives are developed, specific construction issues, if any, will be noted.

Cost Estimate

Cost estimates will be developed as the land-use alternatives are identified.



Graphic Scale (in feet)



FOREST AVENUE

589.44'E 1287.0'

BLUE FLAG 3

BLUE FLAG 1

EX. FENCE

HENRY AVENUE

PRELIMINARY BOUNDARY

LANDS OF THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
A.P.N. 303-017-048
17.16 AC.

BLUE FLAG

BLUE FLAG

EX. FENCE

EX. DWY

S89.36'E

182.0'

N00.14'W 130.0'

N00.14'W 97.0'

CITY OF SANTA CLARA PER 3628548
50.14'E 470.1'

WINCHESTER BOULEVARD

DORCICH STREET

N89.36'W 1109.3'

BLUE FLAG 18

BLUE FLAG 12

N01.65'E 584.1'

Santa Clara County Winchester Blvd. At Forest Ave. - Santa Clara, CA

Utility Inventory Located in Surrounding Streets

N. Winchester Blvd.

| From | To | Utility | Size | Type | Notes |
|---------------------|---------------|----------------|----------|--------------------------|------------------------------------|
| Stevens Creek Blvd. | Dorcich St. | Water | 12" | Cast Iron | |
| | | Sanitary Sewer | 8"-241' | Vitrified Clay Pipe | |
| Dorcich St. | Forest Ave. | Storm Drain | 15"-124' | Reinforced Concrete Pipe | |
| | | Storm Drain | 27"-170' | Reinforced Concrete Pipe | |
| | | Storm Drain | 27"-444' | Reinforced Concrete Pipe | |
| | | Storm Drain | 18"-124' | Reinforced Concrete Pipe | |
| | | Storm Drain | 24"-13' | Reinforced Concrete Pipe | |
| | | Storm Drain | 24"-121' | Reinforced Concrete Pipe | |
| | | Water | 12" | Cast Iron | |
| | | Sanitary Sewer | 8"-444' | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 8"-445' | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 42"-150' | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |
| Forest Ave. | Fernwood Ave. | Storm Drain | 18"-134' | Reinforced Concrete Pipe | |
| | | Storm Drain | 18"-131' | Reinforced Concrete Pipe | |
| | | Storm Drain | 24"-144' | Reinforced Concrete Pipe | |
| | | Water | 12" | Cast Iron | |
| | | Sanitary Sewer | 8"-448' | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 48"-170' | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |

Henry Ave.

| From | To | Utility | Size | Type | Notes |
|-------------|-------------|----------------|------------|--------------------------|-------|
| Cecil Ave. | Dorcich St. | Storm Drain | 18"-252' | Reinforced Concrete Pipe | |
| | | Storm Drain | 18"-37.5' | Reinforced Concrete Pipe | |
| | | Sanitary Sewer | 8"-257' | Vitrified Clay Pipe | |
| | | Water | 8" | Cast Iron | |
| Dorcich St. | Forest Ave. | Storm Drain | 33"-346.5' | Reinforced Concrete Pipe | |
| | | Storm Drain | 33"-346' | Reinforced Concrete Pipe | |
| | | Storm Drain | 33"-40' | Reinforced Concrete Pipe | |
| | | Water | 8" | Cast Iron | |
| | | Sanitary Sewer | 6"-377' | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 6"-354' | Vitrified Clay Pipe | |

Jill Ave.

| From | To | Utility | Size | Type | Notes |
|-------------|---------------|----------------|----------|--------------------------|------------------------------------|
| Forest Ave. | Fernwood Ave. | Sanitary Sewer | 48"-240' | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |

Dorcich St.

| From | To | Utility | Size | Type | Notes |
|---------------------|------------|----------------|------------|--------------------------|-------|
| N. Winchester Blvd. | Cecil Ave. | Storm Drain | 33"-470' | Reinforced Concrete Pipe | |
| | | Storm Drain | 12"-318' | Reinforced Concrete Pipe | |
| | | Water | 8" | Cast Iron | |
| | | Sanitary Sewer | 8"-388' | Vitrified Clay Pipe | |
| Cecil Ave. | Henry Ave. | Storm Drain | 33"-452' | Reinforced Concrete Pipe | |
| | | Storm Drain | 33"-511.5' | Reinforced Concrete Pipe | |
| | | Water | 6" | Wrapped steel | |

Santa Clara County Winchester Blvd. At Forest Ave. - Santa Clara, CA

Utility Inventory Located in Surrounding Streets

Sanitary Sewer 6"-548" Vitrified Clay Pipe
 Sanitary Sewer 6"-531" Vitrified Clay Pipe

Cecil Ave.

| From | To | Utility | Size | Type | Notes |
|-------------|------------|----------------|---------|---------------------|-------|
| Dorrich St. | Henry Ave. | Water | 6" | Wrapped steel | |
| | | Sanitary Sewer | 8"-226" | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 8"-76" | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 8"-57" | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 8"-240" | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 6"-146" | Vitrified Clay Pipe | |
| | | Sanitary Sewer | 6"-451" | Vitrified Clay Pipe | |

Forest Ave.

| From | To | Utility | Size | Type | Notes |
|---------------------|---------------------|----------------|----------|--------------------------|------------------------------------|
| Beechwood Ave. | N. Winchester Blvd. | Sanitary Sewer | 42"-Thru | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |
| N. Winchester Blvd. | Jill Ave. | Water | 8" | Cast Iron | |
| | | Storm Drain | 12"-125" | Reinforced Concrete Pipe | |
| | | Sanitary Sewer | 42"-Thru | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |
| Jill Ave. | Henry Ave. | Water | 8" | Cast Iron | |
| | | Sanitary Sewer | 42"-Thru | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |
| | | Sanitary Sewer | 48"-Thru | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |
| Henry Ave. | Westridge Dr. | Storm Drain | 36"-314" | Reinforced Concrete Pipe | |
| | | Water | 8" | Cast Iron | |
| | | Sanitary Sewer | 42"-Thru | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |
| | | Sanitary Sewer | 48"-Thru | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |

Fernwood Ave.

| From | To | Utility | Size | Type | Notes |
|---------------------|---------------------|----------------|----------|--------------------------|------------------------------------|
| East | N. Winchester Blvd. | Sanitary Sewer | 48"-Thru | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |
| N. Winchester Blvd. | Jill Ave. | Storm Drain | 12"-125" | Reinforced Concrete Pipe | |
| | | Sanitary Sewer | 48"-Thru | Reinforced Concrete Pipe | Owned & Maint. By City of San Jose |

DRAFT

LEGEND

EXISTING WATER LINE

EXISTING STORM DRAIN

EXISTING SANITARY SEWER

PROJECT BOUNDARY



DAVID J. POWERS & ASSOCIATES
1885 The Alameda, Suite 204
San Jose, CA 95126

Date: 12-24-00
Scale: 1"=100'
Designed: JWP
Drawn: JWP
Checked: JWP
Proj. Eng: JWP
File: 3081-00

HMH
ENGINEERS

San Jose
4080 1st St.
Pleasanton
94566-1000
Calif.
4080 1st St.
Pleasanton, CA 94566-1000

Lands of The State of California
(Winchester Blvd., City of Santa Clara)
UTILITY INVESTIGATION

Sheet
1
of 1 Sheets
JOB NUMBER
3081-00